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APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/612,121	07/02/2003		Jamie L. Brewer	260385.20005	6561	
7590 02/23/2006				EXAMINER		
Eugene LeDoi	nne, Esq	JUEDES, AMY E				
Reed Smith, LL 599 Lexington		Floor	ART UNIT	PAPER NUMBER		
New York, NY			1644			

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

			Application No.		Applicant(s)				
Office Action Summary			10/612,121		BREWER ET AL.				
			Examiner		Art Unit				
			Amy E. Juedes, F		1644				
Period for	The MAILING DATE of this commun Reply	ication appe	ears on the cover	sheet with the c	orrespondence ad	ldress			
WHICH - Extension after SI - If NO pe - Failure Any rep	RTENED STATUTORY PERIOD F EVER IS LONGER, FROM THE M ons of time may be available under the provisions K (6) MONTHS from the mailing date of this comm eriod for reply is specified above, the maximum st to reply within the set or extended period for reply ly received by the Office later than three months apatent term adjustment. See 37 CFR 1.704(b).	IAILING DA s of 37 CFR 1.136 nunication. atutory period will r will, by statute, o	TE OF THIS CO S(a). In no event, howe If apply and will expire stages the application to	MMUNICATION over, may a reply be time SIX (6) MONTHS from to be become ABANDONE	I. lely filed the mailing date of this c D (35 U.S.C. § 133).				
Status									
1)⊠ R	esponsive to communication(s) file	ed on <i>02 Jul</i>	y 2003.						
,	•		action is non-fina	al.					
	ince this application is in condition	for allowand	ce except for for	mal matters, pro	secution as to the	e merits is			
•	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Disposition	n of Claims								
4)⊠ C	claim(s) 1-18 is/are pending in the a	application.							
<i>,</i> —	4a) Of the above claim(s) is/are withdrawn from consideration.								
	5) Claim(s) is/are allowed.								
6) 🗌 C	6) Claim(s) is/are rejected.								
7) 🗌 C	claim(s) is/are objected to.								
8)⊠ C	claim(s) <u>1-18</u> are subject to restricti	on and/or el	lection requirem	ent.					
Application	n Papers								
9)□ TI	ne specification is objected to by th	e Examiner.							
•	ne drawing(s) filed on is/are			ected to by the I	Examiner.				
Α	pplicant may not request that any obje	ection to the d	rawing(s) be held	in abeyance. See	e 37 CFR 1.85(a).				
R	eplacement drawing sheet(s) including	g the correction	on is required if the	e drawing(s) is obj	jected to. See 37 C	FR 1.121(d).			
11)∐ TI	ne oath or declaration is objected t	o by the Exa	aminer. Note the	attached Office	Action or form P	TO-152.			
Priority un	der 35 U.S.C. § 119								
12) 🗌 A	cknowledgment is made of a claim	for foreign p	oriority under 35	U.S.C. § 119(a)	)-(d) or (f).				
a)[_	· · · · · · · · · · · · · · · · · · ·								
	<ul> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> </ul>								
	<u> </u>					Stone			
3	. Copies of the certified copies				ed in this National	Stage			
* \$0	application from the Internation the attached detailed Office action				ad.				
36	e the attached detailed Office dotte		or are seraned se	pico not receive					
Attachment(s	5)								
	of References Cited (PTO-892)			Interview Summary					
2) Notice	of Draftsperson's Patent Drawing Review (			Paper No(s)/Mail Da	ate Patent Application (PT	O-152)			
. —	ation Disclosure Statement(s) (PTO-1449 o No(s)/Mail Date	r P10/SB/08)		Other:	atomic approaction (I	- · <del>-</del> -/			

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## DETAILED ACTION

1. Restriction to one of the following inventions is required under 35 U.S.C. § 121:

- I. Claims 1-6, drawn to a method of assessing the expression of mRNA for T cell receptor variable subunit  $\alpha$ ; classified in Class 435, subclass 91.2.
- II. Claims 7-12, drawn to a method of assessing the expression of mRNA for T cell receptor variable subunit  $\beta$ ; classified in Class 435, subclass 91.51.
- III. Claims 13-14, drawn to a kit comprising SEQ ID Nos: 1-32, an enzyme, and buffers; classified in Class 536, subclass 24.33.
- IV. Claims 15-16, drawn to a kit comprising SEQ ID Nos: 33-55, an enzyme, and buffers; classified in Class 435, subclass 183.
- V. Claim 17, drawn to a gene chip comprising SEQ ID Nos: 1-32; classified in Class 536, subclass 24.3.
- VI. Claim 18, drawn to a gene chip comprising SEQ ID Nos: 33-35; classified in Class 536, subclass 24.31.
- 2. Groups III-VI are different products. For example, the products of Groups III-IV are kits comprising enzymes and buffers, while the products of Groups V-VI do not comprise enzymes or buffers, but rather comprise a gene chip. Additionally, the inventions of groups III, V comprise nucleic acid sequences that recognize TCR  $\alpha$  genes, while the inventions of Groups IV,VI comprise different and distinct nucleic acids which recognize TCR  $\beta$  genes.
- 3. Groups I-II are unrelated methods. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are drawn to methods comprising different reagents, resulting in different endpoints. For example, the method of group 1 requires primers specific for TCR  $\alpha$  genes while the method of group II requires primers specific for TCR  $\beta$  genes. Additionally, the two methods

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will results in different outcomes, i.e. determining the expression of TCR  $\alpha$  or TCR  $\beta,$  respectively.

- 4. Groups V-VI and I-II are unrelated because the products of groups V-VI are not used or otherwise involved in the processes of groups I-II.
- 5. Groups III and II are unrelated because the product of group III is not used or otherwise involved in the process of group II.
- 6. Groups IV and I are unrelated because the product of group IV is not used or otherwise involved in the process of group I.
- 7. Groups III and I are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product, the TCR primers, could be used to isolate and clone a TCR gene.
- 8. Groups IV and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product, the TCR primers, could be used to isolate and clone a TCR gene.
- 9. These inventions are distinct for the reasons given above. In addition, they have acquired a separate status in the art as shown by their recognized divergent subject matter. Further, a different field of search would be required based upon the structurally distinct products recited and the various methods of use comprising distinct reagents. Therefore restriction for examination purposes as indicated is proper.

## Species Election

10. This application contains inventions drawn to patentably distinct species. Applicant is further required under 35 US 121 (1) to elect a single disclosed species to which claims would be

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restricted if no generic claim is finally held to be allowable and (2) to list all claims readable thereon including those subsequently added.

If group I is elected, Applicant is required to elect a specific primer sequence from the group consisting of SEQ ID Nos: 1-32 AND to elect a method where the reaction mixture further includes SEQ ID No 56 or does not include SEQ ID No 56.

If group II is elected, Applicant is required to elect a specific primer sequence from the group consisting of SEQ ID Nos: 33-55 AND to elect a method where the reaction mixture further includes SEQ ID No 57 or does not include SEQ ID No 57.

Applicant is also required to indicate which claims read on the elected species, including any claims subsequently added.

The species of primers are distinct because their physiochemical properties differ, due to their unique sequences. Additionally, the species of method are distinct since they require different reagents (i.e. a reaction mixture comprising SEQ ID NO: 56 or 57 or a reaction mixture without said SEQ IDS).

- 11. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement.
- 12. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).
- 13. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

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14. Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed.

- 15. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).
- 16. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. Process claims that depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of In re Ochiai, In re Brouwer and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder.

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Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Amy E. Juedes whose telephone number is 571-272-4471. The examiner can normally be reached on 8am - 5pm from Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on 571-272-0841. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Amy E. Juedes, Ph.D. Patent Examiner Technology Center 1600 February 9, 2006

G.R. EWOLDT, PH.D. PRIMARY EXAMINED